1. **What are various semantic tags added in html5?**

Ans:

|  |  |
| --- | --- |
| **Semantic Elements** | **Other Elements** |
| <header> | <canvas> |
| <nav> | <hgroup> |
| <article> | <address> |
| <section> | <figure> |
| <aside> | <meter> |
| <footer> | <progress> |
|  | <time> |

1. **What are various new input types added in htmls5?**

Ans:

|  |  |
| --- | --- |
| **Input types** | |
| search | week |
| email | time |
| url | datetime-local |
| tel | number |
| datetime | range |
| date | Color |
| month |  |

1. **What are various storage mechanisms in html5?**

Ans:

1.Local Storage: Persists data even the browser or the system is closed.

Methods are: setitem(), getitem(), clear().

2.Session Storage: Wont persists data if the browser or the tab is closed.

1. **What is Canvas?**

Ans: The HTML <canvas> element is used to draw graphics, on the fly, via JavaScript. The <canvas> element is only a container for graphics. You must use JavaScript to actually draw the graphics. Canvas has several methods for drawing paths, boxes, circles, text, and adding images.

1. **What are various canvas methods available?**

Ans: There are two DOM object canvas methods: *getElementById(), getContext().*

**Rectangle Methods**: *fillRect(x,y,width,height), strokeRect(x,y,width,height), clearRect(x,y,width,height).*

**Paths Methods:** *beginPath(), moveTo(x, y), closePath(), fill(), stroke(), arc(x, y, radius, startAngle, endAngle, anticlockwise).*

**Line Methods:** *beginPath(), moveTo(x, y), closePath(), fill(), stroke(), lineTo(x, y).*

**Bezier curve Methods:***beginPath(), moveTo(x, y), closePath(), fill(), stroke(), bezierCurveTo(cp1x, cp1y, cp2x, cp2y, x, y).*

**Quadratic curve Methods:** *beginPath(), moveTo(x, y), closePath(), fill(), stroke(), quadraticCurveTo(cpx, cpy, x, y).*

**Gradients Methods:** *addColorStop(offset, color), createLinearGradient(x0, y0, x1, y1), createRadialGradient(x0, y0, r0, x1, y1, r1).*

**Image Methods:** *beginPath(), moveTo(x, y), closePath(), fill(), stroke(), drawImage(image, dx, dy).*

**Font and Text Methods:** *fillText(text, x, y [, maxWidth ] ), strokeText(text, x, y [, maxWidth ] ).*

**Pattern Methods:** *createPattern(image, repetition).*

**Save and Restore:** *save(), restore().*

**Translation Methods:** *translate(x, y).*

**Clockwise Rotation:** *rotate(angle).*

**Scaling:** *scale(x, y).*

**Transformation Methods:** *transform(m11, m12, m21, m22, dx, dy),**setTransform(m11, m12, m21, m22, dx, dy).*

**Animation Methods:** *setInterval(callback, time), setTimeout(callback, time).*

1. **What is SVG?**

Ans: SVG stands for **S**calable **V**ector **G**raphics and it is a language for describing 2D-graphics and graphical applications in XML and the XML is then rendered by an SVG viewer. SVG is mostly useful for vector type diagrams like Pie charts, Two-dimensional graphs in an X, Y coordinate system etc.

The SVG element is a container that defines a new coordinate system and viewport. It is used as the outermost element of any SVG document, but it can also be used to embed an SVG fragment inside any SVG or HTML document.